

Work Order ID 93399

November-19-12 9:49:54 AM

93399

Page 1

Item ID: D2933-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Saddle LH In, 206

Stop

NS2

Start Date: 11/15/12 Start Qty: 6.00

6

Cust Item ID:

Required Date: 12/07/12 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals:

Process Plan: M13

Date: 12-11-20

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr								
D2933	Rev C								

100 0.00

100 HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

HAAS CNC vertical machine #1

Program part number and batch number.1-Inspect part number and batch number are programmed correctly.2-Machine Step No 1 of Folio and visually inspect as per dwg D2933 & attached Dimension Sheet 3-Machine Step No 2 of Folio and visually inspect as per

PO 13/01/03

6 Ø

110 0.00

110 CONVENTIONAL MILLING MACHINE

Mill Conv

Memo

Conventional Milling Machine

Machine Keyway and inspect per attached dimension sheet

PO 13/01/03

6 Ø

120 0.00

120 QC1- Inspect dimensions to dimension sheet

QC

Memo

Quality Control

PO 13/01/03

6 Ø

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS						
Part No. _____	Work Order:	NCR No. _____	Rework	Scrap	Skid-tube	Crosstube	Water Jet	Engineering			
			Use-as-is	Thermoforming	Machining	Small Fab	Prod. Eng. Coor.	Quality			
			Work Order Update	Large Fab	Finishing	Composite	Rec/Store/Packaging	Other			
Root Cause		Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
Bending		Bend		Grain		Ovalized		Pressure/Forced			
Centre Not Concentric to O/S		BOM/Route		Hardware		Over/Under tolerance		Temperature/Cure			
Cracks		Broken/Damaged		Inspection Incomplete		Part Incorrect		Weld			
Crushed/Crimped.		Burrs		Instructions Incomplete/Unclear		Part Lost/Missing		Wrong Stock Pulled			
Cuffs		Contamination		Maintenance		Part Moved					
Heat Treat		Countersink		Mislabeled		Positioned Wrong					
Inspection Strip in Tube		Cut Too Short		Misread		Power Loss/Surge					
Ripples in Bend		Drill Holes		Offset							
Torque Waves in Extrusion		Drawing		Out of Calibration							
Turning Sequence		Finish		Out of Sequence							
Wave/Twist in Tube		Folio		Outside Dimensions							

Work Order ID 93399***93399***

Page 2

November-19-12 9:49:54 AM

Item ID: D2933-1**Accept*****N900040100*****Setup****Start *NS1*****Revision ID:****Item Name:** Saddle LH In, 206**Stop*****NS2*****Start Date:** 11/15/12 **Start Qty:** 6.00***6*****Cust Item ID:****Required Date:** 12/07/12 **Req'd Qty:** 6.00***6*****Customer:****Reference:****Approvals:** **Process Plan:****Date:****Tooling:****Date:****Run****Start*****NR1*****QC:****Date:****SPC (Y/N):****Date:****Stop*****NR2*****Sequence ID/
Work Center ID****Operation
Description****Set Up/
Run Hours****Tool ID****Tool #****Plan
Code****Accept
Qty****Reject
Qty****Reject
Number****Insp.
Stamp**

130

QC8- Inspect parts - second check

0.00

J-0

13/01/04

6

0

DAS
08
9-89***130***

QC

Quality Control

140

Chemical Conversion Coat per QSI005 4.1

0.00

6 26 13-17

140

HandFinish

Hand Finishing

150

White Gloss(Ref 4.3.5.1) per QSI005 4.3-Alum

0.00

6 0 B-17

150

Powdercoat

Powder Coating

Memo

0.00

START TIME:

2:30

OVEN TEMPERATURE:

300

FINISH TIME:

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____		DISPOSITION			AGAINST DEPARTMENT/PROCESS						
Part No. _____		Rework	<input type="checkbox"/>	Skid-tube	<input type="checkbox"/>	Crosstube	<input type="checkbox"/>	Water Jet	<input type="checkbox"/>	Engineering	<input type="checkbox"/>
NCR No. _____		Scrap	<input type="checkbox"/>	Machining	<input type="checkbox"/>	Small Fab	<input type="checkbox"/>	Prod. Eng. Coor.	<input type="checkbox"/>	Quality	<input type="checkbox"/>
		Use-as-is	<input type="checkbox"/>	Thermoforming	<input type="checkbox"/>	Finishing	<input type="checkbox"/>	Rec/Store/Packaging	<input type="checkbox"/>	Other	<input type="checkbox"/>
		Work Order Update	<input type="checkbox"/>	Large Fab	<input type="checkbox"/>	Composite	<input type="checkbox"/>	Supplier	<input type="checkbox"/>		
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description		Sign & Date	Verification	QC Inspector
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
				Bending	<input type="checkbox"/>	Grain	<input type="checkbox"/>	Ovalized	<input type="checkbox"/>	Pressure/Forced	<input type="checkbox"/>
				Centre Not Concentric to O/S	<input type="checkbox"/>	BOM/Route	<input type="checkbox"/>	Over/Under tolerance	<input type="checkbox"/>	Temperature/Cure	<input type="checkbox"/>
				Cracks	<input type="checkbox"/>	Broken/Damaged	<input type="checkbox"/>	Part Incorrect	<input type="checkbox"/>	Weld	<input type="checkbox"/>
				Crushed/Crimped.	<input type="checkbox"/>	Burrs	<input type="checkbox"/>	Part Lost/Missing	<input type="checkbox"/>	Wrong Stock Pulled	<input type="checkbox"/>
				Cuffs	<input type="checkbox"/>	Contamination	<input type="checkbox"/>	Part Moved	<input type="checkbox"/>		<input type="checkbox"/>
				Heat Treat	<input type="checkbox"/>	Countersink	<input type="checkbox"/>	Positioned Wrong	<input type="checkbox"/>		<input type="checkbox"/>
				Inspection Strip in Tube	<input type="checkbox"/>	Cut Too Short	<input type="checkbox"/>	Power Loss/Surge	<input type="checkbox"/>		<input type="checkbox"/>
				Ripples in Bend	<input type="checkbox"/>	Drill Holes	<input type="checkbox"/>	Other	<input type="checkbox"/>		<input type="checkbox"/>
				Torque Waves in Extrusion	<input type="checkbox"/>	Drawing	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
Turning Sequence	<input type="checkbox"/>	Finish	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>				
Wave/Twist in Tube	<input type="checkbox"/>	Folio	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>				

Work Order ID 93399

November-19-12 9:49:54 AM

93399

Page 3

Item ID: D2933-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Saddle LH In, 206

Stop

NS2

Start Date: 11/15/12 Start Qty: 6.00

6

Cust Item ID:

Required Date: 12/07/12 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

QC3- Inspect Part Finish

0.00

160

QC

Memo

0.00

6x 4 11-1301107

Quality Control

170

Identify as per dwg & Stock Location

ST407

0.00

170

Packaging

Memo

0.00

6x 8 13-01-08

Packaging

180

QC21- Final Inspection - Work Order Release

0.00

180

QC

Memo

0.00

MLS 13-01-08
MLS 13-01-08

Quality Control

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____		DISPOSITION			AGAINST DEPARTMENT/PROCESS					
Part No. _____		Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>				
NCR No. _____		Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>				
		Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>				
		Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Doc/Data										
Equip/Tooling										
Operator										
Material										
Setup										
Other										
Process										
Supplier										
Training										
Unapproved										
FAULT CATEGORY										
Landing Gear	General									
	Bending <input type="checkbox"/>	Grain <input type="checkbox"/>	Ovalized <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>						
	Centre Not Concentric to O/S <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>						
	Cracks <input type="checkbox"/>	Broken/Damaged <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Weld <input type="checkbox"/>						
	Crushed/Crimped. <input type="checkbox"/>	Burrs <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>						
	Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Part Moved <input type="checkbox"/>							
	Heat Treat <input type="checkbox"/>	Countersink <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>							
	Inspection Strip in Tube <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	Other <input type="checkbox"/>						
	Ripples in Bend <input type="checkbox"/>	Drill Holes <input type="checkbox"/>								
	Torque Waves in Extrusion <input type="checkbox"/>	Drawing <input type="checkbox"/>								
	Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>								
	Wave/Twist in Tube <input type="checkbox"/>	Folio <input type="checkbox"/>								

Picklist Print

November-19-12 9:49:54 AM

Page 1

Work Order ID: 93399

Parent Item: D2933-1

Parent Item Name: Saddle LH In, 206

Start Date: 11/15/12

Required Date: 12/07/12

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP: B00.06.26New DWG rev (mpp 2069)EC
IPP Rev:C As per Rev C 07-03-19 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-001 Saddle Billet		Manufactured	No			100	Each	117.0000	1	6	70	12/12/12	

Location	Loc Qty	Loc Code
MAT040	76	
69677	2	
76836	1	
81923	1	
91235	60	
92595	12	
MAT042	1	
83309	1	
MAT045	40	
92550	40	

93368

6

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>		
			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
			Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
Description of work order update or Non-conformance		Initial Chief Eng	Action Description		Sign & Date	Verification	QC Inspector			
Root Cause	Date	Step	Qty							
Doc/Data										
Equip/Tooling										
Operator										
Material										
Setup										
Other										
Process										
Supplier										
Training										
Unapproved										
FAULT CATEGORY										
Landing Gear			General							
<input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			<input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions							
			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Other							
			<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled							

DART AEROSPACE LTD			Work Order:	93399
Description: 206 Saddle, Inboard, Left side			Part Number:	D2933-1
Inspection Dwg: D2933 Rev: C DSK: Rev:			Page 1 of 1	

FIRST ARTICLE INSPECTION DIMENSION SHEET

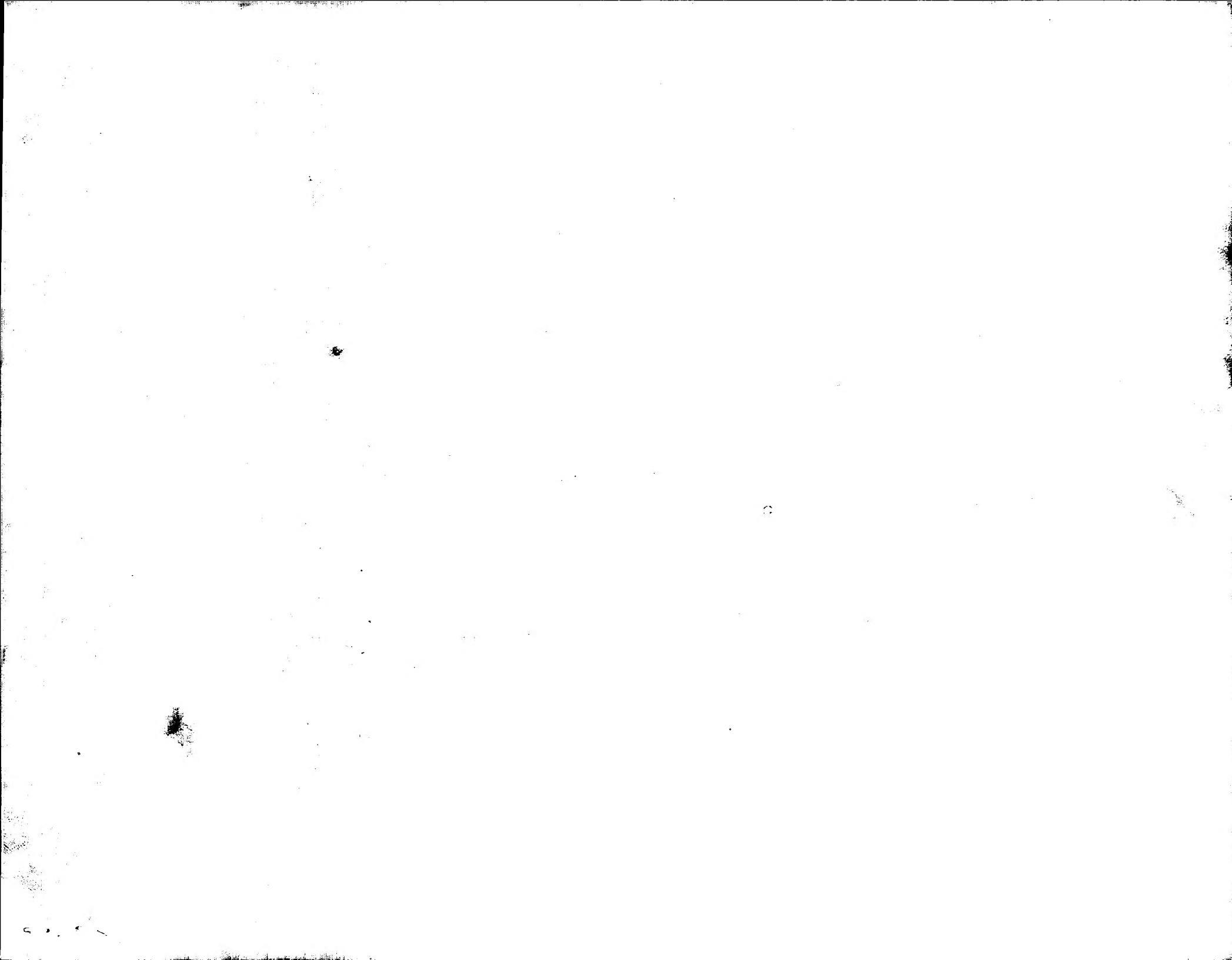
First Article Prototype

Dim	Min	Max	Go/No Go Gauge	Record Actual Dimensions				
				1	2	3	4	5
A	0.100	0.140		.108	.112	.108	.108	.108
B	0.100	0.140		.113	.112	.112	.113	.113
C	0.100	0.140		.112	.113	.111	.114	.116
D	0.210	0.230		.219	.220	.219	.218	.220
E	1.245	1.255		1.250	1.250	1.250	1.250	1.250
F	1.245	1.255		1.250	1.250	1.250	1.250	1.250
G	2.495	2.505		2.500	2.500	2.500	2.500	2.500
H	0.510	0.515		.512	.512	.512	.512	.512
I	1.572	1.582		1.577	1.577	1.577	1.577	1.577
J	2.495	2.505		2.500	2.500	2.500	2.500	2.500
K	0.257	0.262		.258	.258	.258	.258	.258
L	0.312	0.317		.314	.314	.314	.314	.314
M	0.235	0.240		.236	.236	.236	.236	.235
N	0.100	0.140		.119	.119	.119	.116	.119
O	0.540	0.560		.550	.549	.550	.550	.550
P	0.490	0.510		.499	.499	.499	.500	.499
Q	3.715	3.725		3.720	3.720	3.720	3.720	3.720
R	2.470	2.510		2.490	2.490	2.490	2.490	2.490
S	0.240	0.270		.248	.248	.248	.250	.249
T	0.100	0.180		.135	.135	.135	.135	.135
U	1.625	1.635		1.630	1.630	1.630	1.630	1.630
V	1.362	1.372		1.367	1.367	1.367	1.367	1.367
W	0.316	0.321		.316	.316	.316	.316	.316
X	1.125	1.145		1.134	1.134	1.134	1.131	1.133
Y	1.565	1.585		1.572	1.573	1.573	1.569	1.571
Z	0.178	0.198		.188	.188	.188	.188	.188
AA								
AB								
AC								
AD								
AE								

Accept/Reject

Measured by:	PO	Date:	13/01/03
Audited by:	8.A	Date:	13/01/04
Prototype Approval:	N/A	Date:	N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Re-format; Added Dim. X-Y, DT8683, DT8686, DT8690 & DT8695 A/B	KJ/RF	
C	06.10.03	Removed DT8683, DT8686 & DT8690	KJ/JLM	
D	07.03.21	Revised per drawing revision C	KJ/JLM	
E	08.01.16	DT8695 A/B removed from dimension Y	KJ/EC/DD	DS



DART AEROSPACE LTD		Work Order:	93399
Description: 206 Saddle, Inboard, Left side		Part Number:	D2933-1
Inspection Dwg:	D2933	Rev:	Page 1 of 1

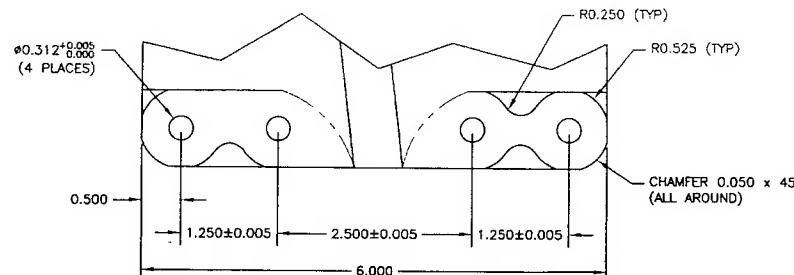
FIRST ARTICLE INSPECTION DIMENSION SHEET

First Article Prototype

Dim	Min	Max	Go/No Go Gauge	Record Actual Dimensions				
				1	2	3	4	5
A	0.100	0.140		.109				
B	0.100	0.140		.112				
C	0.100	0.140		.113				
D	0.210	0.230		.219				
E	1.245	1.255		1.250				
F	1.245	1.255		1.250				
G	2.495	2.505		2.500				
H	0.510	0.515		.512				
I	1.572	1.582		1.577				
J	2.495	2.505		2.500				
K	0.257	0.262		.258				
L	0.312	0.317		.314				
M	0.235	0.240		.236				
N	0.100	0.140		.118				
O	0.540	0.560		.550				
P	0.490	0.510		.500				
Q	3.715	3.725		3.720				
R	2.470	2.510		2.490				
S	0.240	0.270		.249				
T	0.100	0.180		.135				
U	1.625	1.635		1.630				
V	1.362	1.372		1.3677				
W	0.316	0.321		.316				
X	1.125	1.145		1.134				
Y	1.565	1.585		1.573				
Z	0.178	0.198		.189				
AA								
AB								
AC								
AD								
AE								
Accept/Reject								

Measured by:	PO	13/01/04
Audited by:	PO	13/01/04
Prototype Approval:	N/A	Date: N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Re-format; Added Dim. X-Y, DT8683, DT8686, DT8690 & DT8695 A/B	KJ/RF	
C	06.10.03	Removed DT8683, DT8686 & DT8690	KJ/JLM	
D	07.03.21	Revised per drawing revision C	KJ/JLM	
E	08.01.16	DT8695 A/B removed from dimension Y	KJ/EC/DD	DA

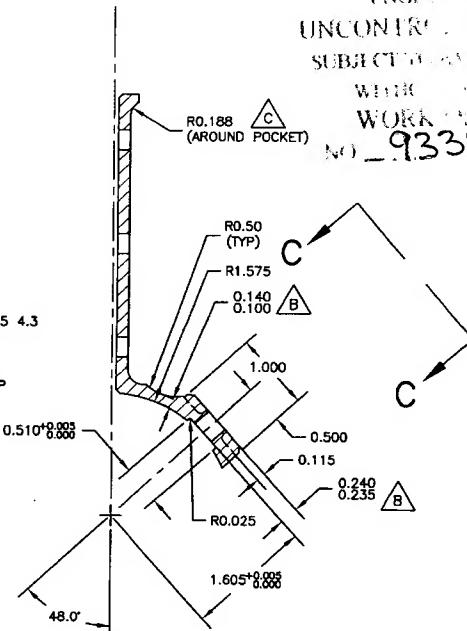


VIEW C-C

D2933-1 LH SADDLE (SHOWN)
D2933-2 RH SADDLE (OPPOSITE)

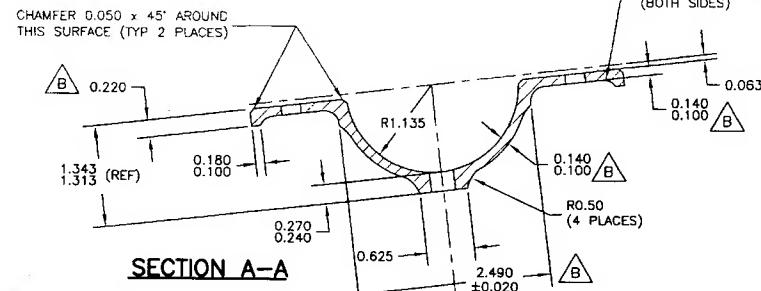
NOTES:

- 1) MATERIAL: ALUMINUM 7075-T7351 (QO-A-250/12) (MAKE FROM D6101-001 SADDLE BILLET, 7075)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
- 3) BREAK ALL SHARP EDGES 0.010 TO 0.020
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) ENGRAVE PART AND BATCH NUMBER IN THIS AREA 0.010 TO 0.015 DEEP

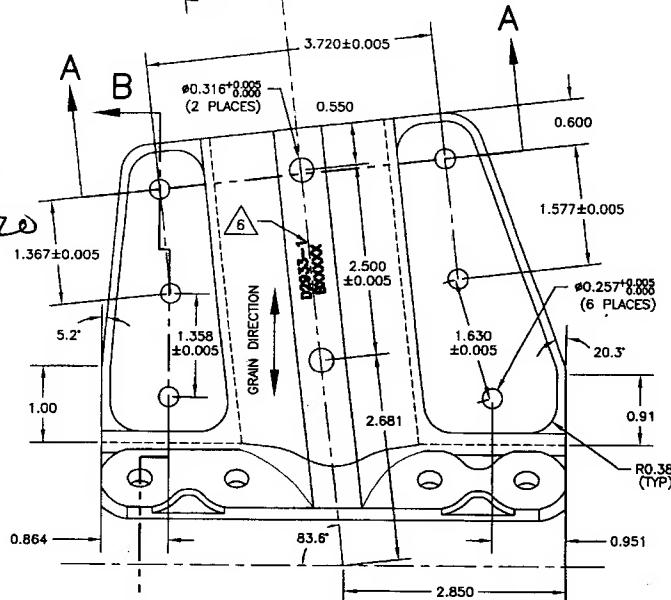


SECTION B-B

07.02.12



SECTION A-A



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DESIGN	DRAWN BY	DART AEROSPACE USA, INC.
CHECKED	APPROVED	DRAWING NO. REV. C
PH	H	D2933
DATE	06.11.09	SHEET 1 OF 1
		SCALE 2:3
		TITLE SADDLE INSIDE

